

REMARKS

Claims 1-21 were pending in this application.

Claims 1-21 were rejected.

No claims have been amended.

Claims 1-21 remain pending in this application.

Reconsideration and full allowance of Claims 1-21 are respectfully requested.

I. REJECTION UNDER 35 U.S.C. § 102

The Office Action rejects Claims 1, 9, and 17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,141,747 to Witt (“Witt”). This rejection is respectfully traversed.

A prior art reference anticipates the claimed invention under 35 U.S.C. § 102 only if every element of a claimed invention is identically shown in that single reference, arranged as they are in the claims. MPEP § 2131; *In re Bond*, 910 F.2d 831, 832, 15 U.S.P.Q.2d 1566, 1567 (Fed. Cir. 1990). Anticipation is only shown where each and every limitation of the claimed invention is found in a single prior art reference. MPEP § 2131; *In re Donohue*, 766 F.2d 531, 534, 226 U.S.P.Q. 619, 621 (Fed. Cir. 1985).

The Office Action correctly notes that Claims 1, 9, and 17 recite supplying a first operand to a floating point read instruction when the first operand is “committed or virtually committed.” The Office Action correctly notes that this element is stated in the alternative, requiring that the first operand be committed “or” virtually committed. (*Office Action, Page 7, Paragraph 13*).

However, the Office Action fails to show that *Witt* recites supplying an operand that is “committed” or “virtually committed.”

As described in the Applicant’s specification, an operand in an operand queue is “committed” when it is stored in a memory. (*Application, Page 3, Lines 8-10*). In contrast, *Witt* recites that data is stored in a store queue 64, and the data is deleted once it is stored in a data cache 44. (*Col. 12, Lines 18-20; Col. 16, Lines 62-63*). Based on this, once data is “committed” to the data cache 44 of *Witt*, the data is deleted from the store queue 64. At that point, the data cannot be supplied from the store queue 64 to satisfy a read instruction. As a result, *Witt* does not anticipate supplying an operand to a floating point read instruction when the first operand is “committed” as recited in Claims 1, 9, and 17.

As described in the Applicant’s specification, an operand is “virtually committed” when (among other things) it is transferred from an operand queue into a buffer. (*Application, Page 19, Lines 3-6*). The operand in the buffer is later transferred to the memory in response to a signal. (*Application, Page 19, Line 22 – Page 20, Line 2*). The Office Action asserts that the store queue 64 of *Witt* anticipates the “operand queue” recited in Claims 1, 9, and 17. (*Office Action, Page 2, Paragraph 2*). Given this assertion, the Office Action must also show that data from the store queue 64 of *Witt* can be “virtually committed” before being stored in a memory (data cache 44). The Office Action cannot make this showing.

Witt shows that data from the store queue 64 is written to the data cache 44. (*Figures 2 and 3*). *Witt* lacks any mention of a buffer capable of storing data to be written to a memory in response to a signal. Moreover, *Witt* merely mentions that data from the store queue 64 is

written to the data cache 44 when an instruction is “retired.” (*Col. 13, Lines 47-52*). *Witt* lacks any mention of “virtually” retiring data by transferring it from the store queue to a buffer and then later storing the data in the cache.

The Office Action asserts that the “virtual commit” functionality is shown in the abstract, Figures 1-3, and column 14, lines 19-29 and 38-56 in *Witt*. (*Office Action, Page 7, Paragraph 13*). At most, the abstract and Figures 1-3 of *Witt* simply show storing data from a store queue in a data cache. These portions of *Witt* lack any mention of “virtually” committing data by transferring it from the store queue to a buffer and then later storing the data in the cache.

Similarly, column 14, lines 19-29 of *Witt* simply recites that the least significant bits of two addresses are received. Column 14, lines 38-56 of *Witt* simply recites the information received by various components in the system of *Witt*. Neither of these portions of *Witt* contain any mention of “virtually” committing data by transferring it from the store queue 64 to a buffer and then later storing the data in a data cache 44.

The Office Action cannot show that *Witt* anticipates supplying an operand to a floating point read instruction when the first operand is “committed” or “virtually committed” as recited in Claims 1, 9, and 17. As a result, the Office Action cannot establish that *Witt* anticipates all elements of Claims 1, 9, and 17.

For these reasons, *Witt* fails to anticipate the Applicant’s invention recited in Claims 1, 9, and 17. Accordingly, the Applicant respectfully requests withdrawal of the § 102 rejection and full allowance of Claims 1, 9, and 17.

II. REJECTION UNDER 35 U.S.C. § 103

The Office Action rejects Claims 2-5, 10-13, and 18-21 under 35 U.S.C. § 103(a) as being unpatentable over *Witt* in view of U.S. Patent No. 5,721,855 to Hinton et al. ("*Hinton*"). The Office Action rejects Claims 6-8 and 14-16 under 35 U.S.C. § 103(a) as being unpatentable over *Witt* and *Hinton* in view of U.S. Patent No. 5,987,593 to Senter et al. ("*Senter*"). These rejections are respectfully traversed.

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. MPEP § 2142; *In re Fritch*, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Piasecki*, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. MPEP § 2142; *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. *In re Bell*, 991 F.2d

781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

As noted above, Claims 1, 9 and 17 are patentable. As a result, Claims 2-8, 10-16, and 18-21 are patentable due to their dependence from allowable base claims.

Accordingly, the Applicant respectfully requests withdrawal of the § 103 rejection and full allowance of Claims 2-8, 10-16, and 18-21.

III. CONCLUSION

As a result of the foregoing, the Applicant asserts that all pending claims in the application are in condition for allowance and respectfully requests an early allowance of such claims.

SUMMARY


If any issues arise, or if the Examiner has any suggestions for expediting allowance of this Application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below or at *wmunck@davismunck.com*.

The Applicant respectfully requests a one-month extension of time for responding to the Office Action. No additional fees are believed to be necessary. However, in the event that any additional fees are required for the prosecution of this application, please charge any necessary fees to Deposit Account No. 140448.

Respectfully submitted,

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